ACS DEPARTURE MODING

       1. <u>ENABLE DEPARTURE SWITCH MONITORING FOR ACS MODING</u>

PCS   MCS: ACS Moding
       | ACS Moding |
       'ACS Configuration'

       √Moding Role Primary, Secondary NCS - Full

```
*********************************************************************
*  If Primary/Secondary NCS Moding Role is not set to Full,  *
*    then the following commands should be sent               *
*                                                             *
*       sel Moding Role                                       *
*                                                             *
*       cmd N1-1 - Arm                                        *
*       cmd N1-2 - Arm                                        *
*      √Arm Status Primary, Secondary NCS - Arm               *
*                                                             *
*       cmd N1-1 - Full                                       *
*       cmd N1-2 - Full                                       *
*      √Moding Role Primary, Secondary NCS - Full             *
*      √Arm Status Primary, Secondary NCS - Disarm            *
*********************************************************************
```

       'Departure'

       sel PMA2 Departure Response SW

       'Primary NCS'

       cmd Enable Arm
      √Arm Status - Arm
       cmd Enable
      √Departure SW - Ena
      √Arm Status - Disarm

       'Secondary NCS'

       cmd Enable Arm
      √Arm Status - Arm
       cmd Enable
      √Departure SW - Ena
      √Arm Status - Disarm

       2. <u>VERIFY DEPARTURE EVENT SOFTWARE STATUS</u>
        'Departure'

       √Departure Event Primary, Secondary NCS - Blank

3. <u>ENABLE APAS LED LIGHTING</u>

PCS   MCS: ACS Moding

| ACS Moding |

NOTE

Each of the primary and secondary commands turns on two of the four LED ACS indication lights (i.e., 4 total). LED configurations: On - Active Attitude Control, Off - Power Off, Flash - ISS in Free Drift.

'ACS Configuration'

sel LED Control SW

'Primary NCS'

cmd Enable
√LED Control SW - Ena
√PMA2 LED State - Flash

'Secondary NCS'

cmd Enable
√LED Control SW - Ena
√PMA2 LED State - Flash

Visual verification by orbiter crew that LED indicators are flashing (-Z windows).

4. <u>MONITOR NCS SEPARATION SIGNALS AND VERIFY ORBITER DEPARTURE AND POST SEPARATION LED MODE CHANGE</u>
Perform CONFIGURATION C&DH FOR ORBITER UNDOCKING, all, (SODF: C&DH), then:

Verify **MCC-H/MCC-M** Go for orbiter departure.

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┌─────────────────────────────────────────────────────────┐
│                         NOTE                            │
│  1.  Monitor the change in parameter values during orbiter │
│      undocking.                                          │
│      At orbiter separation (i.e., Undocking Complete is  │
│      true and                                           │
│      Interface Sealed is false), the attitude control    │
│      countdown timer is                                 │
│      initiated.                                         │
│                                                         │
│  2.  Monitor the Countdown Timer.  The primary Departure │
│      Event is                                           │
│      received when the Countdown Timer reaches zero. The │
│      occurrence of this event prompts the SM to reactivate│
│      its ACS                                            │
│      system.                                            │
│                                                         │
│  3.  For flights 2A through 3A, orbiter crew interface   │
│      will be lost at OIU                                │
│      disconnect.                                        │
│                                                         │
│        The following will be conducted via ground control.│
└─────────────────────────────────────────────────────────┘
```

PCS   MCS: ACS Moding
                 | ACS Moding |
                'Departure'

                √PMA2 Interface Sealed Primary, Secondary NCS - Blank

                √PMA2 Undocking Complete Primary, Secondary NCS - X

                √Countdown Timer Primary, Secondary NCS - (Decreasing)

                √Departure Event Primary, Secondary NCS - X (when timer = 00:00)

     5. VERIFY RUSSIAN SEGMANT MODE STATUS
        'ACS Configuration'

        √RS Mode Primary NCS - Cntl
        √RS Mode Secondary NCS - Cntl

        √PMA2 LED State Primary NCS - On
        √PMA2 LED State Secondary NCS - On

         Visual verification by orbiter crew that LED Indicators are On
          (-Z windows).